



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>5</sup> :</b> <b>A61L 11/00, B65B 55/14</b> <b>C05F 3/00, 7/00, 9/00</b> <b>C05F 11/00</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 91/02550</b> <b>(43) International Publication Date:</b> <b>7 March 1991 (07.03.91)</b>
<b>(21) International Application Number:</b> <b>PCT/DK90/00208</b> <b>(22) International Filing Date:</b> <b>15 August 1990 (15.08.90)</b> <b>(30) Priority data:</b> <b>4016/89</b> <b>16 August 1989 (16.08.89)</b> <b>DK</b> <b>(71)(72) Applicant and Inventor:</b> <b>CLAUSEN, Hans, Jacob [DK/DK]; Gudsø Engvej 15, DK-7000 Fredericia (DK).</b> <b>(74) Agent:</b> <b>SKØTT-JENSEN, K.; Lemmingvej 225, DK-8361 Hasselager (DK).</b> <b>(81) Designated States:</b> <b>AT, AT (European patent), AU, BB, BE (European patent), BF (OAPI patent), BG, BJ (OAPI patent), BR, CA, CF (OAPI patent), CG (OAPI patent), CH, CH (European patent), CM (OAPI patent), DE*, DE (European patent)*, DK, DK (European patent), ES, ES (European patent), FI, FR (European patent), GA (OAPI patent), GB, GB (European patent), HU, IT (European patent), JP, KP, KR, LK, LU, LU (European patent), MC, MG, ML (OAPI patent), MR (OAPI patent), MW, NL, NL (European patent), NO, RO, SD, SE, SE (European patent), SN (OAPI patent), SU, TD (OAPI patent), TG (OAPI patent), US.</b>		<b>Published</b> <i>With international search report.</i>
<b>(54) Title:</b> <b>PROCESS AND PLANT FOR PRODUCING HEAT TREATED GROWTH SUBSTRATE AND MANURE</b>  <b>(57) Abstract</b> <p>In natural substrate or fertilizer materials such as sphagnum, coir dust or poultry manure seeds and other impurities can occur which can be neutralized by heat treatment. By the invention is provided a particularly effective treatment in that the material after passage of a flow-through kiln (8) is led further to a heat insulated tunnel (38), such that the period of heat treatment can be prolonged essentially without additional energy consumption, and the material flow is led through a transportation system substantially closed in relation to the surroundings, and which comprises a cooling zone (42), in which the material is cooled by blow-through with filtrated air, an admixing station (12) in which desired fertilizer substances and microbiological matter are added to the material flow, and a delivery zone or station (16), in which the material is dosed to closed transportation containers, e.g. closed sacks. It is hereby secured that a material, which has been fully pasteurized in the kiln in an economical manner, is not contaminated or infected before delivery, and that the additives at the current production can be added after a controlled cooling of the material, such that they occur with full utility value. The quality and uniformity of sphagnum substrate will be highly improved by the treatment.</p>		